

southern latitude and greater proximity to the continent must exercise some influence; 3rdly and lastly, with respect to the species of the adjacent African continent, of which only a few of the larger species, or of others introduced by commerce, but none of the far more numerous smaller kinds, are known. It is much to be desired that future investigations may be carried on in these directions.

Teneriffe, July 28, 1858.

XII.—*Descriptions of six recently discovered species, and Characters of a new genus of Araneidea.* By JOHN BLACKWALL, F.L.S.

Tribe Octonoculina.

Family LYCOSIDÆ.

Genus DOLOMEDES, Latr.

Dolomedes ornatus.

Length of the female $\frac{1}{10}$ th of an inch; length of the cephalothorax $\frac{1}{20}$; breadth $\frac{1}{4}$; breadth of the abdomen $\frac{1}{10}$; length of a posterior leg $\frac{1}{7}$; length of a leg of the third pair $\frac{1}{8}$.

The cephalothorax is convex, glossy, compressed before, rounded on the sides, and has a slight indentation in the medial line; a broad brownish-red band, which tapers to its posterior extremity, extends along the middle, and on each side of it there is a longitudinal brown band, which decreases in breadth to the lateral eye of the posterior row; the sides have a pale, dull, yellow hue, that of the lateral margins is black, and a blackish spot occurs on the frontal margin, below each lateral eye of the anterior row. The falces are conical, vertical, and armed with a few teeth on the inner surface: the maxillæ are short, somewhat enlarged and rounded at the extremity, and slightly inclined towards the lip. These organs have a pale, dull, yellowish hue; a blackish streak extends along the former, and appears like a continuation of the spot on the frontal margin of the cephalo-thorax. The lip is nearly quadrate, and of a yellowish-brown colour, the sides being much the darkest. The sternum is heart-shaped, and of a pale, dull, yellow hue, with broad, brownish-black lateral margins. The eyes are seated on black spots on the sides and in front of the anterior part of the cephalothorax; the four anterior ones are minute, and form a straight transverse row, the exterior ones, each of which is placed on a minute tubercle, being rather the smallest; the other four are large, and describe a trapezoid whose posterior side is much the longest; the posterior eyes of the trapezoid are seated on tubercles, and the anterior ones are the largest of the eight. The legs are mode-

rately long, provided with hairs and fine spines, and are of a pale yellowish hue, with minute black spots; the fourth pair is rather the longest, the first and second pairs are equal in length, and the third pair is the shortest; each tarsus is terminated by three claws; the two superior ones are curved and pectinated, and the inferior one is inflected near its base. The palpi resemble the legs in colour, and have a small, curved, pectinated claw at their extremity. The abdomen is oviform, thinly clothed with hairs, convex above, and projects over the base of the cephalothorax; the upper part is of a yellowish-brown colour; at its anterior part there are four short longitudinal streaks, the exterior ones of which increase in breadth to their posterior extremity; to these succeed three large spots placed transversely, the intermediate one being in advance of the other two; and between the latter and the spinners there is a series of short transverse bars, somewhat enlarged at their extremities, which decrease in length to the coccyx; these streaks, spots, and bars have a brown hue; the sides and under part are of a pale yellowish colour; the former are slightly tinged with brown, and a longitudinal brownish-black band occurs on each side of the medial line of the latter; these bands converge to the spinners, where they meet.

The Rev. O. P. Cambridge took two young females of this species at Lyndhurst, in the New Forest, Hampshire, in September 1858, which were transmitted to me by Mr. R. H. Meade in the same year.

Family THOMISIDÆ.

Genus PHILODROMUS, Walck.

Philodromus elegans.

Length of the female $\frac{5}{24}$ ths of an inch; length of the cephalothorax $\frac{1}{10}$; breadth $\frac{1}{10}$; breadth of the abdomen $\frac{1}{9}$; length of a leg of the second pair $\frac{1}{2}$; length of a leg of the third pair $\frac{3}{10}$.

The legs are long, slender, provided with hairs and spines, and are of a yellow-brown hue, with red-brown annuli; the second pair the longest, then the first, and the third pair the shortest; the metatarsi and tarsi have hair-like papillæ on their inferior surface, and the latter are terminated by two curved, pectinated claws. The palpi are short, and resemble the legs in colour. The cephalothorax is short, broad, convex, compressed before, rounded on the sides, clothed with whitish hairs, particularly on the lateral margins, and of a pale yellowish colour; a broad dark brown band extends along each side, a narrow longitudinal one of the same hue, which is enlarged near its middle, occupies the medial line, and a short, fine, dark brown streak occurs on each side of its anterior extremity. The eyes,

which are nearly equal in size, are disposed on the anterior part of the cephalothorax in two transverse, curved rows, forming a crescent whose convexity is directed forwards; and the lateral ones are seated on minute tubercles. The falces are subconical and vertical: the maxillæ are convex near the base, obliquely truncated at the extremity on the outer side; and inclined towards the lip, which is triangular and pointed at the apex; and the sternum is heart-shaped. These parts are of a yellowish-brown colour, with the exception of the base of the lip, which has a dark brown hue. The abdomen is oviform, clothed with short hairs, convex above, notched in the middle of the anterior extremity, and projects over the base of the cephalothorax; a broad yellowish-brown band extends along the middle of the upper part, the anterior region of which comprises a dark brown fusiform band, having an angular point on each side, and occupying rather more than a third of its length; this band is bordered laterally with yellowish white, and between it and the spinners there is a series of alternate, short, yellowish-white and dark brown curved bars, whose convexity is directed forwards, a triangular spot of the latter hue, having its vertex in contact with the coccyx, terminating the series; the sides are of a dark brown hue, and have conspicuous yellowish-white streaks and spots disposed obliquely upon them; the under part is of a yellowish-white colour, with minute dark brown spots, and three longitudinal bands of the same hue, which meet at the spinners, the intermediate one being the narrowest of the three.

Specimens of this handsome *Philodromus*, which, by its colours and the design resulting from their distribution, bears a striking resemblance to certain species of the genus *Sphasus*, were taken in September 1858 at Lyndhurst, in the New Forest, by the Rev. O. P. Cambridge, who also captured immature individuals of *Sphasus lineatus* in the same locality; by which discovery he has added another genus to our indigenous spiders. Specimens of both species were transmitted to me by Mr. R. H. Meade.

Family CINIFLONIDÆ.

Genus CINIFLO, Blackw.

Ciniflo mordax.

Length of the female $\frac{5}{8}$ ths of an inch; length of the cephalothorax $\frac{1}{4}$; breadth $\frac{1}{6}$; breadth of the abdomen $\frac{1}{4}$; length of an anterior leg $\frac{17}{24}$; length of a leg of the third pair $\frac{15}{24}$.

The eyes are disposed on the anterior part of the cephalothorax in two transverse rows; the anterior row, which is straight, is situated near the frontal margin, and the posterior row is slightly curved, with its convexity directed backwards; the in-

termediate eyes of both rows describe a trapezoid whose anterior side is the shortest; and the eyes of each lateral pair, which are rather the largest of the eight, are seated obliquely on a tubercle. The cephalothorax is large, convex, glossy, compressed before, and rounded on the sides, which are marked with furrows converging towards an elongated indentation in the medial line; it is depressed and broadly truncated in front, and of a red-brown colour, the cephalic region, which is much the darkest, having a brownish-black hue. The falces are very powerful, conical, vertical, convex in front near the base; armed with teeth on the inner surface, and of a brownish-black hue. The maxillæ are strong, enlarged and rounded at the extremity, and somewhat curved towards the lip: the lip is longer than broad, dilated about the middle, and truncated at the apex; and the sternum is oval and glossy. These parts have a red-brown hue, the sternum being much the palest, particularly in the middle. The legs are robust, provided with hairs and sessile spines, and of a red-brown colour; the metatarsi of the posterior pair are provided with calamistra on their superior surface, and each tarsus is terminated by three claws; the two superior ones are curved and pectinated, and the inferior one is inflected near its base; the first pair the longest, then the fourth, and the third pair the shortest. The palpi resemble the legs in colour, the radial and digital joints being the darkest, and have a curved, pectinated claw at their extremity. The abdomen is oviform, convex above, and projects over the base of the cephalothorax; it is thinly clothed with hairs, and of a brown colour obscurely freckled with yellowish white, the under part being the palest; a yellowish-white band extends along the middle of the upper part, about two-thirds of its length, and an obscure longitudinal line of the same hue occurs on each side of the middle of the under part; the sexual organs are highly developed, and of a dark reddish-brown colour; the spinners are eight in number, and, with the exception of those of the inferior pair, which are united throughout their entire length and have a yellowish-white hue, are of a red-brown colour.

This spider was captured in the Isle of Wight, on the 1st of August 1858, by Frederick Bond, Esq., who gave it to the Rev. O. P. Cambridge; it was forwarded to me for inspection by Mr. R. H. Meade.

Genus ERGATIS, Blackw.

Ergatis pallens.

Length of the female $\frac{1}{8}$ th of an inch; length of the cephalothorax $\frac{1}{20}$; breadth $\frac{1}{4}$; breadth of the abdomen $\frac{1}{6}$; length of an anterior leg $\frac{1}{6}$; length of a leg of the third pair $\frac{1}{8}$.

The cephalothorax is compressed before, depressed and rounded on the sides, which are marked with furrows converging towards the middle, and the cephalic region is convex and rounded in front; it is of a dark brown colour, with a broad yellowish-brown band, which tapers to its posterior extremity, and is densely covered with yellowish-grey hairs, extending from the eyes along the middle, nearly two-thirds of its length, and a dentated yellowish-white band on each lateral margin. The eyes are nearly equal in size, and disposed in two transverse rows on the anterior part of the cephalothorax; the intermediate ones of the two rows form a square, and those of each lateral pair are placed obliquely on a tubercle, near to each other. The falces are powerful, conical, and vertical: the maxillæ are convex at the base, somewhat dilated near the middle, rounded at the extremity, which is more abruptly curved on the inner than on the outer side, and inclined towards the lip, which is large, triangular, and rounded at the apex; and the sternum is heart-shaped. These parts are of a reddish-brown colour, the sternum and lip being the darkest, and the falces much the palest. The legs and palpi are moderately long, provided with hairs, and of a pale, dull, yellow hue. The legs of the first pair are the longest, then the second, and the posterior legs, which have a calamistrum on the superior surface of their metatarsi, are longer than the third pair; each tarsus is terminated by three claws; the two superior ones are curved and pectinated, and the inferior one is inflected near its base. The abdomen is oviform, convex above, and projects over the base of the cephalothorax; it is clothed with short hairs, and is of a greyish-yellow colour; in the medial line of the upper part there is a dark red-brown spot, nearly of a circular form, situated full one-third of its length from its anterior extremity; and at the posterior extremity a few short, curved, transverse bars of the same hue occur, which diminish in length as they approach the spinners; a few obscure dark brown streaks and spots are disposed along the sides, and a broad longitudinal band of the same colour occupies the middle of the under part; the spinners are eight in number, and the two inferior ones are united throughout their entire length.

This *Ergatis*, which was taken among heath at Lyndhurst, in the New Forest, by the Rev. O. P. Cambridge, in September 1858, and was forwarded to me by Mr. R. H. Meade, though immature, is certainly a distinct species.

Genus VELEDA, Blackw.

Eyes small, nearly equal in size, disposed on the anterior part of the cephalothorax in two transverse, curved rows, whose

convexity is directed forwards ; the anterior row, which is the less curved, is situated near the frontal margin, and the intermediate eyes, which are seated on a tubercle, are the largest, and the lateral ones rather the smallest of the eight ; the lateral eyes of both rows are widely apart, and are placed on minute tubercles, and the intermediate ones form a trapezoid whose anterior side is the shortest, thus :— 

Maxillæ moderately long, straight, powerful, greatly enlarged and rounded at the extremity, which is prominent on the inner surface.

Lip short, triangular, and rounded at the apex.

Legs very unequal in length ; the first pair much the longest, then the fourth, and the third pair the shortest ; each metatarsus of the posterior pair is provided with a calamistrum situated on its superior surface.

Spinners eight ; those constituting the inferior pair are united throughout their entire length.

Veleda lineata.

Length of the female $\frac{1}{8}$ th of an inch ; length of the cephalothorax $\frac{1}{16}$; breadth $\frac{1}{24}$; breadth of the abdomen $\frac{1}{16}$; length of an anterior leg $\frac{1}{4}$; length of a leg of the third pair $\frac{1}{2}$.

The abdomen is of an oblong oviform figure, convex above, and projects over the base of the cephalothorax ; the anterior extremity and the posterior part of each side are densely covered with white hairs ; the upper part is of a dull or brownish-yellow colour, with three longitudinal dark brown lines, whose posterior half is somewhat ramified, extending its entire length ; one of these lines, which is broadest towards its anterior extremity, occurs in the middle, and another is situated on each side of it ; the anterior and part of the superior region of the sides, extending towards the spinners, and the under part are of a brownish-black colour. The cephalothorax is long, moderately convex, compressed before, depressed and rounded on the sides, and clothed with white hairs ; it is of a brown-black colour, with three longitudinal brownish-yellow lines, one in the middle, and another on each side, and narrow lateral margins of the same hue. The falces are short, conical, vertical, and of a yellowish-brown colour. The maxillæ and lip have a dark brown hue, the apex of the latter being much the palest. The sternum is of an oblong oval form ; it is thinly clothed with white hairs, and has a brownish-black hue. The legs are hairy, and the inferior surface of the tarsus and of the extremity of the metatarsus of the posterior pair is provided with short spines ; they

are of a yellowish-brown colour, with dark brown streaks and annuli. The palpi are short, and resemble the legs in colour, that of the digital joint being dark brown.

Four specimens of this interesting spider, taken by the Rev. O. P. Cambridge among heath at Lyndhurst, in the New Forest, in September 1858, and forwarded to me by Mr. R. H. Meade, were all immature; independently, however, of this circumstance, the species presents such remarkable differences in external structure from the spiders belonging to the several genera included in the family *Ciniflonidae*, that I have been induced to found a new genus upon it.

Family AGELENIDÆ.

Genus AGELENA, Walck.

Agelena gracilipes.

Length of the male $\frac{1}{10}$ th of an inch; length of the cephalothorax $\frac{1}{15}$; breadth $\frac{1}{24}$; breadth of the abdomen $\frac{1}{24}$; length of a posterior leg $\frac{5}{24}$; length of a leg of the third pair $\frac{5}{20}$.

The legs are long, slender, provided with hairs and sessile spines, two parallel rows of the latter occurring on the inferior surface of the tibiae and metatarsi of the first and second pairs, and are of a dull yellow colour, with the exception of the genual joint, tibia, and metatarsus of the first and second pairs, which have a very dark brown hue, the genual joint being the palest; each tarsus is terminated by two curved, pectinated claws. The palpi have a dull yellow hue; the cubital and radial joints are short, and the latter projects a brown, pointed apophysis from its extremity, on the outer side; the digital joint is oval, convex and hairy externally, concave within, comprising the palpal organs, which are moderately developed, rather prominent, not very complicated in structure, with a small, curved, black spine at their extremity, and are of a dull yellow colour tinged with brown. The cephalothorax is convex, glossy, slightly compressed before, rounded and depressed on the sides, which are marked with furrows converging towards a slight, narrow indentation in the medial line; it is of a dark brown colour tinged with dull yellow, especially in the medial line, the lateral margins being the darkest. The eyes are disposed on the anterior part of the cephalothorax in two transverse curved rows whose convexity is directed backwards; the intermediate eyes of both rows form a trapezoid whose shortest side is before, those of the anterior row, which is rather the less curved, being the smallest of the eight. The falces are conical and vertical: the maxillæ are short, convex near the base, rounded at the extremity, and slightly inclined towards the lip; and the sternum is heart-

shaped. These parts are of a brownish-yellow colour, the base of the falces being the brownest. The lip is nearly quadrate, being rather broader at the base than at the apex, and has a dark brown hue. The abdomen is oviform, thinly clothed with hairs, convex above, and projects over the base of the cephalothorax; it has a brownish-black hue on the upper part, with an obscure mark of a quadrilateral figure and yellow-brown colour at the anterior extremity; and between this mark and the spinners there is a series of obscure, curved, yellow-brown lines, having their convexity directed forwards; the under part is of a yellowish-brown colour, strongly tinged with dark brown at its posterior extremity, and the spinners, which are short, have a pale yellow hue.

The Rev. O. P. Cambridge took this spider at Lyndhurst, in the New Forest, in September 1858; and it was sent to me in the same year by Mr. R. H. Meade.

XIII.—*Descriptions of several new Land Shells from the Mauritius.* By W. H. BENSON, Esq.

THAT the land-shells of the circumscribed island of Mauritius are as yet unexhausted, may be surmised from its having lately yielded the following species, some of them of typical forms not previously known among its testaceous productions. I am indebted to my friend Sir David W. Barclay for the opportunity of describing them.

Helix Caldwelli, Barclay, MSS.

Testa aperte umbilicata, orbiculato-depressa, confertim oblique sinuato-costata, costis crassiusculis elevatis, sub epidermide fulvo-albida; spira planulata, sutura leviter impressa; anfractibus 6 vix convexiusculis, ultimo antice majore, depresso, ad peripheriam valde rotundato, subtus convexo; apertura obliqua, ovato-lunata, peristomate sinuato, superne antice arcuato, depresso, ad dextram et infra reflexo, marginibus subapproximatis, basali intus stricte labiato, prope columellam dente lato laminari introrsum flectente munito; umbilico infundibuliformi.

Diam. major 9, minor $7\frac{1}{2}$, axis $3\frac{1}{3}$ mill.

Habitat in sylvis insulæ Mauritii.

Found under the roots of trees in a previously unexplored forest on the heights of Plaines Wilhelm, towards the head of Tamarind River and of the gorges of the Black River, by Professor Caldwell, of the Royal College, Port Louis, and named after its zealous discoverer at the request of Sir D. Barclay. The shell reminds the observer of more than one North American